What is claimed is:

1. A thermal developing apparatus for removing non-crosslinked polymer from an imaged surface of a flexographic printing element, the thermal developing apparatus comprising:

at least one heatable roll that is contactable with an imaged surface of a flexographic printing element; and

means for maintaining contact between the at least one heatable roll and the imaged surface of the flexographic printing element,

wherein when the at least one heatable roll is heated and is moved over at least a portion of the imaged surface of the flexographic printing element, non-crosslinked polymer on the imaged surface of the flexographic printing element is melted and removed by the at least one heatable roll.

2. The thermal developing apparatus according to claim 1, wherein a blotting material is positioned on at least a portion of the at least one heatable roll, and wherein when the at least one heatable roll is heated and is contacted with the imaged surface of the flexographic printing element, non-crosslinked polymer on the imaged surface of the flexographic printing element is melted by the heated roll and is removed by the blotting material.

3. The thermal developing apparatus according to claim 2, wherein the blotting material is looped under and around at least the portion of the at least one heatable roll that contacts the imaged surface of the flexographic printing element.

4. The thermal developing apparatus according to claim 3, wherein the blotting material is continuously supplied to the at least one heatable roll from a remote source of the blotting material.

5. The thermal developing apparatus according to claim 3, further comprising a rewind device to carry away the blotting material that contains the removed non-crosslinked polymer.

6. The thermal developing apparatus according to claim 2, wherein the blotting material is paper.

7. The thermal developing apparatus according to claim 1, further comprising a doctor blade that is positionable adjacent to the at least one heatable roll, and wherein when the at least one heatable roll removes non-crosslinked polymer from the imaged surface of the flexographic printing element, the doctor blade wipes the non-crosslinked polymer from the surface of the at least one heatable roll.

8. The thermal developing apparatus according to claim 1, wherein the means for maintaining contact between the at least one heatable roll and the imaged surface of the flexographic printing element comprises an air cylinder or a hydraulic cylinder that forces the at least one heatable roll against the imaged surface of the flexographic printing element.

9. The thermal developing apparatus according to claim 1, wherein the flexographic printing element is cylindrical.

10. The thermal developing apparatus according to claim 9, wherein the at least one heatable roll rotates over at least a portion of the imaged surface of the flexographic printing element.

11. The thermal developing apparatus according to claim 10, wherein the at least one heatable roll rotates in a first direction and the cylindrical flexographic printing element rotates in an opposite direction from the at least one heatable roll.

12. The thermal developing apparatus according to claim 9, further comprising means for allowing the at least one heatable roll to traverse along the length of the cylindrical flexographic printing element.

13. The thermal developing apparatus according to claim 9, wherein the means for maintaining contact between the at least one heatable roll and the imaged surface of the flexographic printing element comprises an air cylinder or a hydraulic cylinder that forces

the at least one heatable roll against the imaged surface of the flexographic printing element.

14. The thermal developing apparatus according to claim 9, wherein a blotting material is positionable on at least a portion of the at least one heatable roll, and wherein when the at least one heatable roll is heated and is contacted with the imaged surface of the flexographic printing element, non-crosslinked polymer on the imaged surface of the flexographic printing element is melted by the heated roll and is removed by the blotting material.

15. The thermal developing apparatus according to claim 14, wherein the blotting material is looped under and around at least the portion of the at least one heatable roll that contacts the imaged surface of the flexographic printing element.

16. The thermal developing apparatus according to claim 15, wherein the blotting material is continuously supplied to the at least one heatable roll from a remote source of the blotting material.

17. The thermal developing apparatus according to claim 16, further comprising a rewind device to carry away the blotting material that contains the removed non-crosslinked polymer.

18. The thermal developing apparatus according to claim 14, wherein the blotting material is paper.

19. The thermal developing apparatus according to claim 9, wherein the at least one heatable roll comprises two heatable rolls that are opposably positioned adjacent and apart from each other and are each maintainable in contact with the imaged surface of the flexographic printing element, and wherein when the two heatable rolls are contacted with the imaged surface of the flexographic printing element, the two heatable rolls are self-centering against the imaged surface of the flexographic printing element.

20. The thermal developing apparatus according to claim 19, wherein a blotting material is continuously fed to the two heatable rolls by looping the blotting material under and around at least the portion of the first heatable roll that is contactable with the imaged surface of the flexographic printing element, looping the blotting material around one or more track rolls positioned between the two heatable rolls, and then looping the blotting material under and around at least the portion of the second heatable roll that is contactable with the imaged surface of the flexographic printing element.

21. The thermal developing apparatus according to claim 20, further comprising one or more additional heatable rolls that are positionable in an opposing position on an opposite side of the cylindrical flexographic printing element, wherein the one or more additional heatable rolls are maintainable in contact with at least a portion of the imaged surface of the flexographic printing element.

22. The thermal developing apparatus according to claim 9, further comprising a doctor blade that is positionable adjacent to the at least one heated roll, and wherein when the at least one heatable roll removes non-crosslinked polymer from the imaged surface of the flexographic printing element, the doctor blade wipes the non-crosslinked polymer from the surface of the at least one heatable roll.

23. A method of removing non-crosslinked polymer from an imaged surface of a flexographic printing element with at least one heatable roll, the method comprising:

a) heating the at least one heatable roll;

b) causing contact between the at least one heated roll and the imaged surface of the flexographic printing element; and

c) rotating the at least one heated roll against at least a portion of the imaged surface of the flexographic printing element to melt and remove non-crosslinked photopolymer from the imaged surface of the flexographic printing element.

24. The method according to claim 23, wherein the at least one heated roll traverses the length of the cylindrical flexographic printing element.

25. The method according to claim 24, wherein the at least one heated roll traverses the length of the flexographic printing element multiple times until all of the non-crosslinked polymer is removed from the imaged surface of the flexographic printing element.

26. The method according to claim 25, wherein the at least one heated roll traverses the length of the cylindrical flexographic printing element in a spiral or stepwise manner.

27. The method according to claim 23, wherein the at least one heated roll rotates in a first direction and the cylindrical flexographic printing element rotates in an opposite direction from the at least one heated roll.

28. The method according to claim 23, wherein an air cylinder or a hydraulic cylinder is used to maintain contact between the at least one heated roll and the imaged surface of the flexographic printing element.

29. The method according to claim 23, wherein at least the portion of the at least one heated roll that is in contact with the imaged surface of the flexographic printing element is covered with a blotting material and the blotting material removes the non-crosslinked polymer from the imaged surface of the flexographic printing element.

30. The method according to claim 29, wherein the blotting material is looped under and around at the least the portion of the at least one heated roll that is in contact with the imaged surface of the flexographic printing element.

31. The method according to claim 30, wherein the blotting material is continuously fed to the at least one heated roll from a remote source of the blotting material.

32. The method according to claim 31, wherein the blotting material that contains the removed non-crosslinked photopolymer is rewound onto a rewind device.

33. The method according to claim 29, wherein the blotting material comprises paper.

34. The method according to claim 23, wherein the non-crosslinked polymer remaining on the at least one heated roll after removal from the imaged surface of the flexographic printing element is removed from the at least one heated roll by positioning a doctor blade adjacent to the at least one heated roll to wipe the non-crosslinked polymer from the surface of the at least one heated roll.

35. The method according to claim 29, wherein the at least one heated roll comprises two heated rolls that are positioned adjacent and apart from each other and are each maintained in contact with the imaged surface of the flexographic printing element and wherein the two heated rolls are self-centering against the imaged surface of the flexographic printing element.

36. The method according to claim 35, wherein the blotting material is continuously fed to the two heated rolls by wrapping blotting material around at least the portion of the first heated roll that is in contact with the imaged surface of the flexographic printing element, looping the blotting material around one or more track rolls positioned between the two heated rolls, and then wrapping the blotting material around at least the portion of the second heated roll that is in contact with the imaged surface of the flexographic printing element.

37. The method according to claim 35, wherein one or more additional heated rolls are positioned in an opposing position on an opposite side of the cylindrical flexographic printing element and maintained in contact with at least a portion of the imaged surface of the flexographic printing element.

38. The method according to claim 23, wherein the at least one heated roll is maintained at a temperature of about 350 °F to about 450 °F.